

## U.S. ENVIRONMENTAL PROTECTION AGENCY

**DATE:** May 23, 2003

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**TO:** S. Hitchcock, EPA  
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Region 4, RRC (for distribution)

**SUBJECT:** BS Xpress Diazinon Spill, Louisville, KY, Polrep No. 2

### I. BACKGROUND

SITE ID:	A4BH
PROJECT CEILING:	None
LEAD AGENCY:	EPA, Region 4, ERRB 61 Forsyth Street, SW Atlanta, Georgia 30303
NPL:	No
FUNDING:	CERCLA
LEAD OSC:	Art Smith
START DATE:	May 20, 2003

### II. SITE INFORMATION

- A. **Incident Category:** Emergency Response
- B. **Site Description:**

#### 1. Physical Location and Site Characteristics

The site consists of those areas within the State DOT right of way (R/W) and off-site surface water affected by the release of up to 1,000 gallons of diazinon from a motor carrier accident occurring on May 20, 2003 at exit 9A of I-71 in Louisville, KY (NRC #645525). The product was reported to be a mixture of 87% diazinon and 13% soy oil. It is estimated that several hundred gallons of product escaped containment at the wreck scene and an unknown quantity migrated offsite to two ponds located on private property north of State Route 841. Analytical data for samples collected on 5/21/03 reveal that diazinon is present at about 1 part per million (ppm) in Ponds 1 and 2, located about ½ mile downgradient of the wreck site. A similar concentration is reported for Pond 3, which is reportedly the headwaters for a sinking stream, which reappears as Pond 4 about 600 ft. away. The stream exiting Pond 4 is an unnamed tributary to Wolf Pen Branch, which discharges to Harrods Creek (see attached site sampling map for location of ponds and streams) .

## **2. Description of Threat:**

At the concentrations reported in off-site surface water, diazinon poses a potential threat to human health and the environment. While nearly all residents in the area are connected to a public water supply, Pond 4 serves as the drinking water supply for a single user. For this incident, EPA would consider concentrations of greater than 30 parts per billion (30 ppb) in a private drinking water source to be of potential concern, and would recommend an alternate source of drinking water at levels exceeding 100 ppb.

Kentucky Department for Environmental Protection (KYDEP) has developed surface water quality criteria of 110 ppb for the response to this incident, based on acute toxicity in aquatic species. This is based on field observations taken on 5/21/03, where a fish kill of less than 20 small specimens (i.e., minnows and bream) was detected in Ponds 1 and 2. The Kentucky Department of Fish and Wildlife Resources (KDFWR) has been notified, and is providing a rep to assist in evaluating the impacts to natural resources.

Sampling by the Louisville Water Company (LWC) in Harrods Creek revealed the absence of diazinon above detection limits. At the present time, the release of diazinon from the May 20 truck wreck poses no threat to the public water supply.

## **III. RESPONSE INFORMATION**

### **A. Situation**

#### **1. Current Situation:**

EPA is the lead agency for directing the continued response to the incident, pursuant to its authorities under the National Contingency Plan (NCP). The response is being managed in coordination with KYDEP, Louisville Metro Health Department, and the Metropolitan Sewer District (MSD). Private party response actions are being led by Sygenta Crop Protection, the manufacturer of the pesticide product. Sygenta has contracted with Evergreen Environmental Group to conduct sampling and cleanup operations for the incident. Response activities continue to focus on removal of pockets of product and contaminated sediment in the State DOT R/W drainage system, and the sampling and analysis of surface water in affected off-site areas. At the present time, LWC is providing rapid turnaround analytical services for the unified command, due to the inability of private labs to meet the demand for overnight results.

#### **2. Response Actions to Date:**

Over 150 tons of contaminated soil and debris from the wreck site have been excavated and staged for disposal. Several thousand gallons of a dilute diazinon mixture have been recovered from culverts and ditches within the State DOT R/W. Sample collection continues daily in areas within the R/W and in the off-site surface water system.

The USGS KY District Office has been supporting the response to this incident, at the request of the OSC. USGS collected field measurements on 5/21/03 to establish surface water hydrology for the impacted ponds and streams.

A Community Involvement Coordinator (CIC) from EPA Region 4 is onscene to assist in meeting with property owners and developing a fact sheet for this response. A press release will be issued by EPA and the local Health Department on 5/23/03 to update the public on recent findings.

### **3. Enforcement:**

The Responsible Party, BS Xpress, Inc. (RP) failed to notify the National Response Center of this incident, until advised to do by the OSC nearly 30 hrs. after the spill took place (NRC # 645635). Diazinon is a Clean Water Act hazardous substance, with a Reportable Quantity of 1 lb. The OSC is forwarding this case to the Region 4 Enforcement Program for further evaluation.

### **B. Planned Response Actions**

The EPA OSC has consulted with the EPA Environmental Response Team (ERT), and the LWC in evaluating potential field treatment options. A trial application of activated carbon in sandbags placed across the outlet of Pond 1 and 2 is being evaluated at the incident command level.

Field detection capability for analyses of diazinon in surface water is scheduled to be implemented 5/23/03. Attempts will be made to profile diazinon concentrations with depth and collect bottom sediment from the ponds to evaluate if additional treatment/removal options are feasible.

## **IV. COSTS**

Information on EPA's costs including those of the START-2 contractor (Tetra Tech, EMI, Inc.) is not available at this time.